

Serial No. 09/993,080
Amendment Dated January 19, 2006
Reply to Office Action of November 3, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A method for producing a maize cell in which a nucleotide of interest is stably integrated, said method comprising:
 - (a) isolating at least one immature embryo from a maize ear; and
 - (b) introducing a nucleotide construct into at least one cell of said immature embryo by microprojectile bombardment within 6 hours of isolating said immature embryo wherein said immature embryo does not come in contact with an external auxin before or during bombardment.
- 2-3. (Cancelled)
4. (Previously Presented) The method of claim 1 wherein said immature embryo comes in contact with a medium that comprises an osmotic potential greater than that produced by a medium containing 3% (w/v) sucrose.
5. (Previously Presented) The method of claim 4 wherein said medium comprises an osmoticum consisting of sucrose, sorbitol, mannitol, polyethylene glycol, or combinations thereof.

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6. (Previously Presented) The method of claim 1 wherein said immature embryo does not come in contact with an external phytohormone before or during bombardment.
- 7-25. (Cancelled)
26. (Currently Amended) ~~The method of claim 25, further~~ A method for producing a transgenic maize plant, said method comprising:
- (a) obtaining at least one immature embryo from a maize plant;
 - (b) introducing a nucleotide construct into at least one cell of said immature embryo by microprojectile bombardment wherein introduction of the nucleotide construct occurs within 6 hours of isolating said immature embryo;
 - (c) contacting said immature embryo with an auxin-depleted a transformation support medium prior to said bombardment; and
 - (d) regenerating said cell into a transgenic maize plant wherein said cell comprises stably incorporated in its genome at least one copy of said nucleotide construct or part thereof.
27. (Cancelled)
28. (Previously Presented) The method of claim 26 wherein said auxin-depleted transformation support medium comprises an osmotic potential greater than that produced by a medium containing 3% (w/v) sucrose.
29. (Original) The method of claim 28 wherein said auxin-depleted transformation support medium comprises an osmoticum of sucrose, sorbitol, mannitol, polyethylene glycol, or combinations thereof.

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30. (Original) The method of claim 26 wherein said auxin-depleted transformation support medium is phytohormone depleted.

31-35. (Cancelled)

36. (Previously Presented) The method of claim 26 wherein said immature embryo is held on said auxin-depleted transformation support medium not more than about 4 hours before said nucleotide construct is introduced.

37. (Original) The method of claim 36 wherein said immature embryo is held on said auxin-depleted transformation support medium not more than about 2 hours before said nucleotide construct is introduced.

38-54. (Cancelled)

55. (Previously Presented) A method for stable transformation of freshly excised embryos said method comprising:

- (a) obtaining at least one immature embryo from a maize plant;
- (b) introducing a nucleotide construct into at least one cell of said immature embryo by microprojectile bombardment comprising 0.6 μ Au particles, rupture disk rating of about 200 p.s.i., and positioning said immature embryo between about 8 cm and about 12 cm from the macrocarrier platform wherein said microprojectile bombardment occurs within 6 hours of obtaining said immature embryo and wherein no external auxin comes in contact with the immature embryo before microprojectile bombardment is performed.

56-62. (Cancelled)